

# CLIMATE ADAPTATION

## Climate Change and Adaptation Training Series for Grassland Conservation Practitioners

Training Series Participants/Emma Kuster

### INTRODUCTION

Human activity has dramatically reduced the historical expanse of North American Grasslands. Climate change is projected to hasten this decline and amplify existing stressors. Many grassland managers have received little to no formal climate change education. Inconsistent levels of climate literacy across the grasslands management community make it difficult to implement adaptive, climate-informed conservation actions. To improve climate literacy and provide guidance in creating adaptation strategies, multiple Climate Adaptation Science Centers and the U.S. Fish and Wildlife Service co-developed the *Climate Change and Climate Adaptation Training for Grassland Conservation Practitioners*.

### KEY ISSUES ADDRESSED

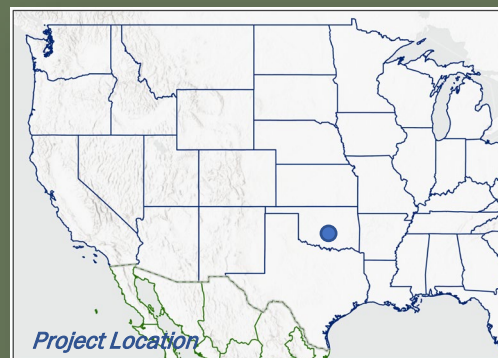
Grassland ecosystems will continue to face stressors from climate change and human activity. By incorporating climate change considerations into the development of management strategies, grassland managers will be better equipped to address these stressors. Inconsistent levels of climate literacy among grassland managers will slow this process.

These inconsistencies must be resolved to ensure climate data is universally understood and correctly interpreted, which is necessary to create well-informed management strategies.

Support is necessary to guide practitioners through the climate adaptation process, from identifying vulnerabilities to implementing tactics and monitoring for success. This support ensures they can effectively adapt their management strategies to address the impacts of climate change on grassland ecosystems.

### PROJECT GOALS

- Develop and deliver climate adaptation training for grassland managers.
- Increase grassland manager's foundational climate change knowledge to support informed decision-making.

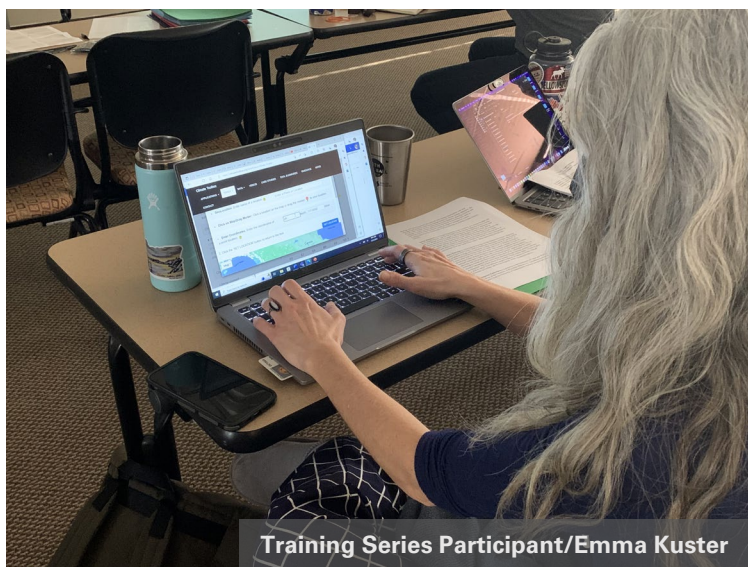


## PROJECT HIGHLIGHTS

**Improving Climate Literacy Among Grassland Managers:** The project team conducted a self-paced online course and three webinars to introduce the participants to fundamental climate change knowledge and climate model data necessary for conducting vulnerability assessments. The series concluded with a day-and-a-half in person workshop where the knowledge acquired from the online course and webinars would be used to resolve conservation issues.

**Incorporating Climate Information into Decision-Making:** Participants engaged in a role-playing activity incorporating the “Resist-Accept-Direct” (RAD) Framework and relevant climate information to develop management strategies for the Regal Fritillary (*Speyeria idalia*) and Grasshopper Sparrow (*Ammodramus humeralis*) using a five-step process that was modeled after the adaptation workbook planning process, developed by the Northern Institute of Applied Climate Science.

**Acquiring Participant Feedback:** Participant feedback indicated the activities improved their understanding of climate information across the virtual and in-person components and the content prepared them to incorporate climate information into decision-making.



Training Series Participant/Emma Kuster

## LESSONS LEARNED

The training series received positive feedback. Some participants expected the self-paced portion to focus more on applying climate science to grassland management rather than introductory climate change content. While later modules addressed the connection between climate change and grassland management, clearly advertising the content associated with each training segment may help prevent future misunderstandings.

The webinars received positive feedback. However, the organizers faced difficulties in encouraging participant engagement. Advertising the series as a ‘webinar’ gave the impression of a passive learning experience. Using different terms, such as ‘virtual classroom’ and ‘active learning session,’ might reduce the likelihood of misunderstandings.

The in-person workshop received positive feedback, participants valued the inclusion of the Climate Toolbox and the “Resist-Accept-Direct” decision framework. Minor concerns arose about the lack of examples addressing ecosystem-wide issues, as the exercises focused only on a single species in a specific area. Lengthening the workshop duration would allow time to include examples of ecosystem scenarios.

## NEXT STEPS

- Develop future training series to guide land managers through developing climate adaptation strategies for different biomes.

## PARTNERS

- See online for full list of partners
- For more information, contact Emma Kuster: [emmakuster@ou.edu](mailto:emmakuster@ou.edu)

